

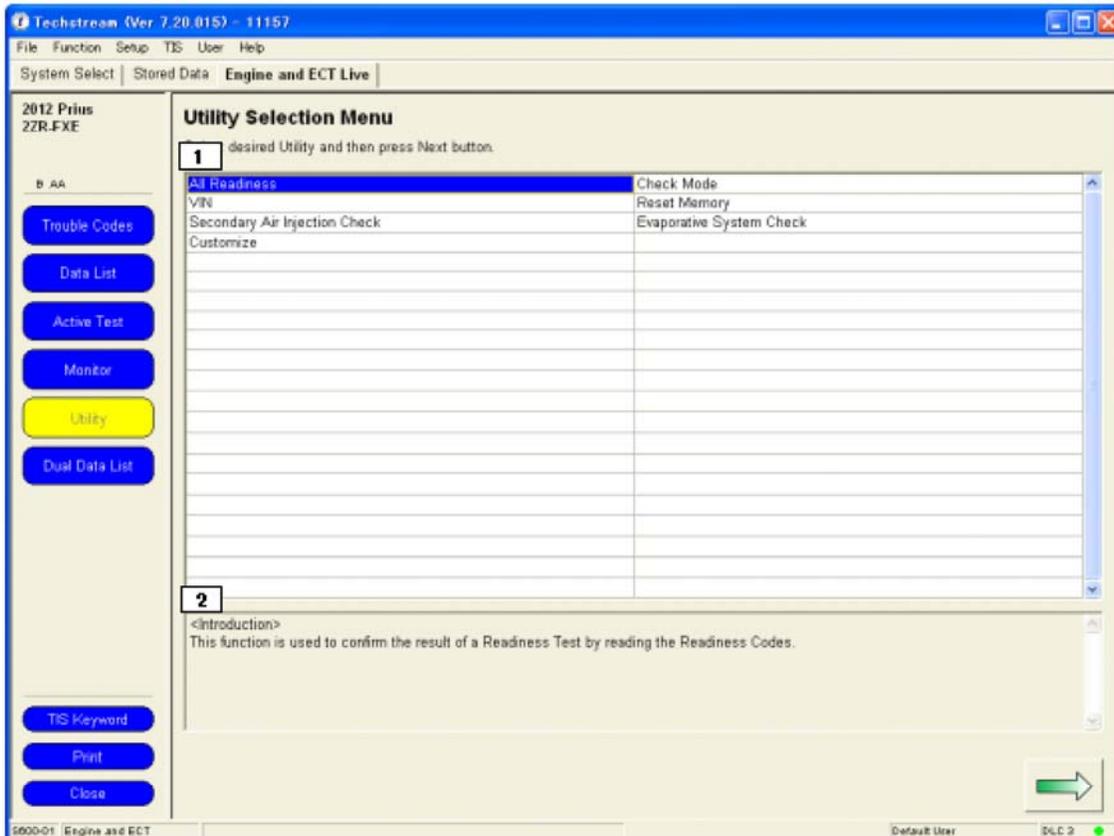
Utility

Various Techstream functions are accessed through the Utility.

Utility Selection Menu

The Utility Selection Menu can be displayed by pressing the Utility button from the Live Tab.

By selecting an item and pressing the Next button, the Utility can be started. The items displayed in the Utility Selection Menu differ for each ECU.



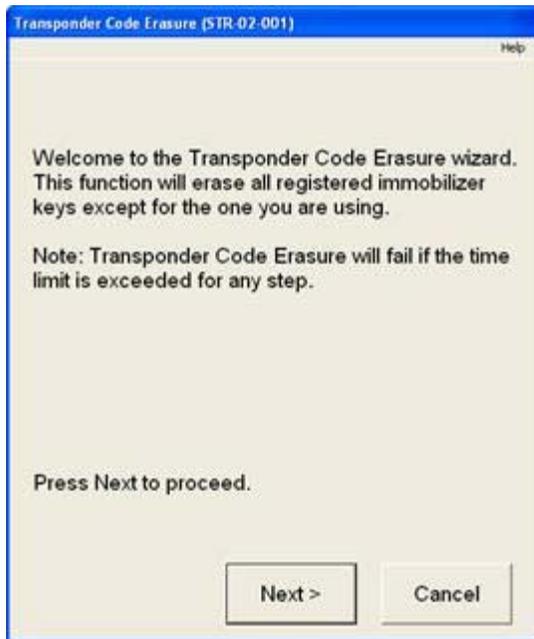
Diagnosis Screen (Utility)

- 1 **Utility List**
Displays a list of utilities. Possible to select optional utilities.
 - 2 **Description of Utility**
Displays an explanation of optional utilities selected from the Utility List.
-  **Next button**
Possible to start optional utilities selected from the Utility List. From the time utility is started until it is complete, Techstream is in standby status and cannot be used.

The list of Utility functions are dependent on the vehicle, and the ECU's installed. The utilities are in Wizard format. Perform the operations in accordance with the directions on the screen. Transponder Code Erasure will be introduced as an example.

Transponder Code Erasure Example

The Transponder Code Erasure Wizard will appear once the Next button is pushed. Perform operations in accordance with the directions on the screen. Advance to the next step by clicking the Next button. If the Cancel button is pressed, the Wizard will close.



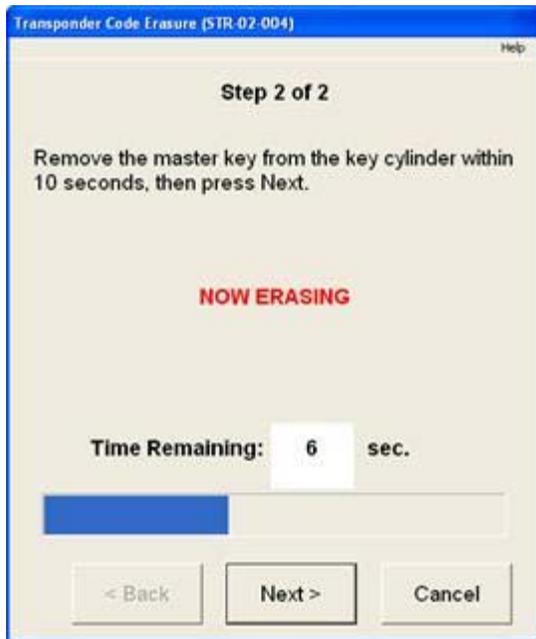
Transponder Code Erasure 1/4 (Utility)

Perform the operations on the screen within the given time limit. In this case, the master key must be inserted in the key cylinder, the ignition switch turned ON, and the Next button pressed, all within the 120 second time limit.



Transponder Code Erasure 2/4 (Utility)

Perform the operations on the screen within the given time limit. In this case, the master key must be removed from the cylinder and the Next button pressed, all within the 10 second time limit.



Transponder Code Erasure 3/4 (Utility)

At this point the Transponder Code Erasure Wizard is normally complete. Press the Exit button to quit the Wizard.



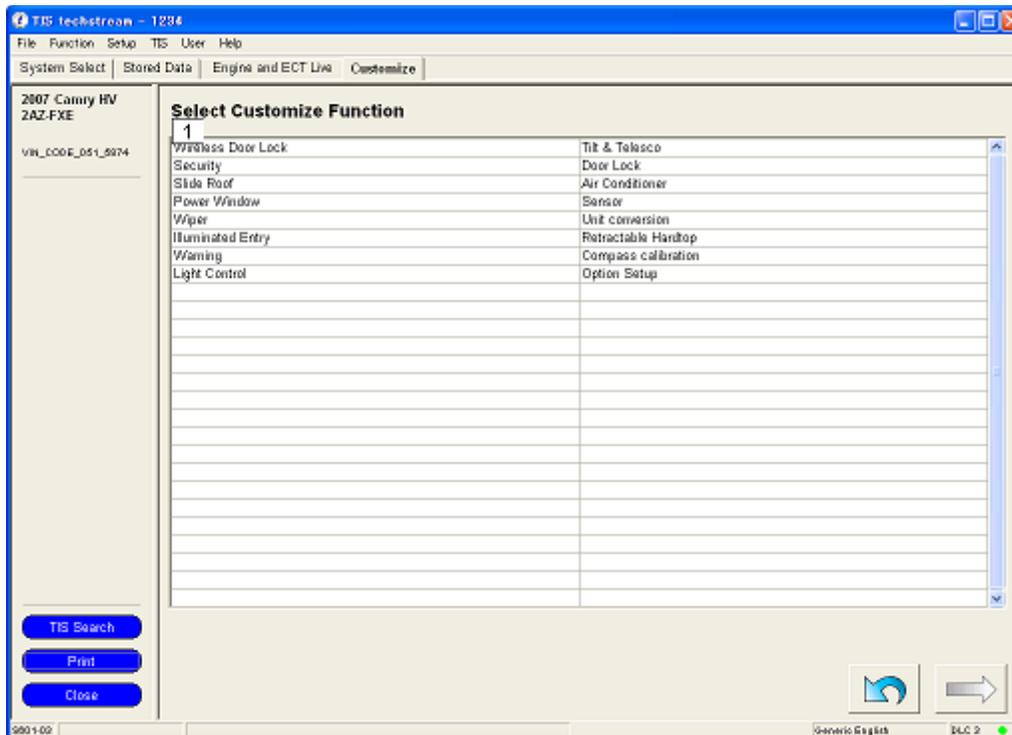
Transponder Code Erasure 4/4 (Utility)

Customize

It is possible to verify and change the set values for customizable items. Customizable items are divided by function into Door Lock, Security, Power Window, etc.

Select Customize Function

The Select Customize Function screen can be displayed by: 1) pressing the Customize button from the Menu on the System Selection Menu, or 2) selecting Customize from the Utility Selection Menu, then pressing the Next button. The user is able to customize from this screen.



Diagnosis Screen (Customize)

- Customize function list**
Select the function for the target Customize setting.
- Default button**
Set all functions to the default value for the target Customize setting.
- Customize button**
Display details for the selected function in a pop-up dialog box and set the desired function.

Caution

When the Default button is pressed, settings will be returned to the default values and all current settings will be lost.

Customize Parameter select

The Customize Parameter Select screen displays the current content for a Customize item. It is also possible to change the set values from this screen.

1	ITEM	2					SETTING
	CAR FINDER	ON	OFF				
	UNLOCK/2 OPER	D_DOOR	D_SIDE	ALL			
	B WINDOW OPEN	1 TIME	2 TIMES	3 TIMES	OFF		
	HAZAERD ANS BACK WWWWWWWWWWWWWWWW	ON	OFF				
	INTLGT ON/UNLK	ON	OFF				
	OPEN DOOR WARN	AUTOMATIC	MANUAL				
	DOWN / WIRELESS	ON	OFF				
	ALARM FUNCTION	ON	OFF				
	WIRELS BUZ VOL	MIN	MID 1	MID 2	MID 3	MAX	
		OFF					

Item Description
3

Print TIS Keyword Cancel Apply

Customize Dialog



Item Name

Displays the name designated for the Customize item. When the row for an item is selected, the background color changes.



Customize value list

Verify the current set value for a designated customize item or designate a value change. Current set values have a blue background. Values designated to be changed have a yellow background. Values designated to be changed are not reflected in the ECU until the Apply button is clicked.



Item Description

Displays a description for items corresponding to a selected row in the Customize value list.



Print button

Prints the contents of the Customize value list.



Service Information Keyword button

Executes the Service Information Keyword function.



Cancel button

Cancels the value designated in the Customize value list and returns the screen to the Utility Selection Menu.



Apply button

Reflects the value selected from the Customize value list in the ECU. Even after the value is reflected in the ECU, the current dialog box remains.

Caution Dialog

This screen is displayed when there is a caution for a Customize item.



Caution Dialog

Operation History

Displays a list of operation factors.

The screenshot shows the Techstream software interface for a 2010 RX450h 2GR-FXE. The main window is titled "Operation History" and contains a table of operation factors. The table has the following columns: "Elapsed Time after CPU Reset", "Time & Date", "Key Cycle", and "CPU Reset Count". The first row of data shows an elapsed time of 1d 23h 57m, a time and date of 2010/11/22 11:14, 14 key cycles, and 2 CPU resets. Below the table, there is a "Description" section with a text area containing the message: "A new key registration failure: Except Vehicle ID NG. An attempt was made to register a new key (an unregistered key) by holding it to the engine switch but registration was not possible due to noise or a failing key battery." The interface also includes a left-hand navigation pane with various system components like File Notes, Health Check, Data 1.20, Time Stamp, Data 2.20, Hybrid Control, ABS/VSC/T, EMPS, Air Conditioner, SRS Airbag, Combination, Tire Pressure, Main Body, D-Door Motor, Smart Access, DTC/Monit, Operation, Data 3, and Power Source. A "Drop Down Menu" is visible above the table, and a "Description" section is at the bottom. The status bar at the bottom right shows "Default User" and "DLC 3".

Diagnosis Screen (Operation History)



Time Stamp when the Data was stored

Displays names of recorded user operations.

- Elapsed Time after CPU Reset
Shows elapsed time since the last CPU reset until the data save.
- Time & Date
Shows absolute time at the time of the data save.
- Key Cycle
Shows the number of Key Cycles at the time of the data save.
- CPU Reset Count
Shows the CPU Reset Count at the time of the data save.

2 Drop Down Menu

Shows a list of operation factors.

3 Operation History List

Displays a list of the user operations, from new to old, for the item selected in the Drop Down Menu.

- Elapsed Time after CPU Reset
Shows elapsed time since the last CPU reset until the user operations.
- Time & Date
Shows calculated absolute time of the user operations.
- Key Cycle
Shows the number of Key Cycles at the time of the user operations.
- CPU Reset Count
Shows the CPU Reset Counts at the time of the user operations.
- Parameter Name

Displays names of recorded user operations.



Description

Displays a help description for the selected operation history.



Display Level

This function determines display level of the Operation History. The Parameter Name fields show Operation History items allowed for the selected display level.

Displays a list of operation factors of the power supply's ECU.

The screenshot shows the Techstream software interface for a 2010 RX450h. The main window is titled "Operation History" and contains the following elements:

- 1**: A table with columns: "Elapsed Time after CPU Reset", "Time & Date", "Key Cycle", and "CPU Reset Count". The data row shows: "1d 23h 57m", "2010/11/22 11:14", "14", and "2".
- 2**: A drop-down menu labeled "Certification ECU operation log".
- 3**: A table with columns: "Elapsed Time after CPU Reset", "Time & Date", "Key Cycle", "CPU Reset Count", and "Parameter Name". The data rows include:

Elapsed Time after CPU Reset	Time & Date	Key Cycle	CPU Reset Count	Parameter Name
02h 03m	-	48	0	New Key Registration Failed
				New Key Registration Failed
				New Key Already Registered
+ 00h 00m	-	0	3	New Key Already Registered
- 4**: A "Description" section with the text: "A new key registration failure: Except Vehicle ID NG. An attempt was made to register a new key (an unregistered key) by holding it to the engine switch but registration was not possible due to noise or a failing key battery."
- 5**: Radio buttons for "Standard" and "Expert" display levels.

Diagnosis Screen (Operation Factors of the Power Supply's ECU)



Time Stamp when the Data was stored

Displays names of recorded user operations.

- Elapsed Time after CPU Reset

Shows elapsed time since the last CPU reset until the data save.

- Time & Date

Shows absolute time at the time of the data save.

- Key Cycle

Shows the number of Key Cycle at the time of the data save.

- CPU Reset Count

Shows the CPU Reset Count at the time of the data save.

2 Drop Down Menu

Shows a list of operation factors.

3 Operation History List

Displays a list of the user operations, from new to old, for the item selected in the Drop Down Menu.

- Operation tree

Sets the factor at the top of tree.

- Elapsed Time after CPU Reset

Shows elapsed time since the last CPU reset until the user operations.

- Time & Date

Shows calculated absolute time of the user operations.

- Key Cycle

- Shows the number of Key Cycles at the time of the user operations.
- CPU Reset Count
 - Shows the CPU Reset Counts at the time of the user operations.
- Parameter Name
 - Displays names of recorded user operations.



Description

Displays a help description for the selected operation history.



Display Level

This function determines display level of the Operation History. The Parameter Name fields show Operation History items allowed for the selected display level.

Record on Behavior

Displays a list of causes of charging operation failure.

The screenshot shows the 'Charge Cancel History' window in Techstream. At the top, it displays '2012 Prius PHV 2ZR-FXE'. Below this, there are two summary boxes: 'Current Key Cycle' (02004) and 'Current Key Cycle Elapsed Time' (00000:04:36). The main area is a table with the following columns: FFD Group, Code, Behavior, Time and Date, Key Cycle, and Elapsed Time. The table contains 18 rows of data, all dated 6/1/2011 9:07 AM. The behaviors listed include 'Charge Canceled (Charge Connector Not Engaged Properly)', 'Charge Canceled (Power Failure)', 'Charge Canceled (AC Line)', and 'Charge Canceled (Battery Temperature)'. The Key Cycle for all entries is 00462, and the Elapsed Time is 00000:02:18.7. The interface also includes a left sidebar with navigation options like 'Sort', 'Expand', 'TIS Search', 'Print', and 'Back'.

FFD Group	Code	Behavior	Time and Date	Key Cycle	Elapsed Time
01	X1000	Charge Canceled(Charge Connector Not Engaged Properly)	6/1/2011 9:07 AM	00462	00000:02:20.8
01	X1000	Charge Canceled(Charge Connector Not Engaged Properly)	6/1/2011 9:07 AM	00462	00000:02:18.7
01	X1000	Charge Canceled(Charge Connector Not Engaged Properly)	6/1/2011 9:07 AM	00462	00000:02:18.7
01	X1010	Charge Canceled(Power Failure)	6/1/2011 9:07 AM	00462	00000:02:18.7
01	X1010	Charge Canceled(Power Failure)	6/1/2011 9:07 AM	00462	00000:02:18.7
01	X1010	Charge Canceled(Power Failure)	6/1/2011 9:07 AM	00462	00000:02:18.7
02	X1030	Charge Canceled(AC Line)	6/1/2011 9:07 AM	00462	00000:02:18.7
02	X1030	Charge Canceled(AC Line)	6/1/2011 9:07 AM	00462	00000:02:18.7
02	X1030	Charge Canceled(AC Line)	6/1/2011 9:07 AM	00462	00000:02:18.7
03	X1060	Charge Canceled(Battery Temperature)	6/1/2011 9:07 AM	00462	00000:02:18.7
03	X1060	Charge Canceled(Battery Temperature)	6/1/2011 9:07 AM	00462	00000:02:18.7
03	X1060	Charge Canceled(Battery Temperature)	6/1/2011 9:07 AM	00462	00000:02:18.7
04	X10A0	Charge Delayed(Charge Control Value Low)	6/1/2011 9:07 AM	00462	00000:02:18.7
04	X10A0	Charge Delayed(Charge Control Value Low)	6/1/2011 9:07 AM	00462	00000:02:18.7
04	X10A0	Charge Delayed(Charge Control Value Low)	6/1/2011 9:07 AM	00462	00000:02:18.7

Diagnosis Screen (Record on Behavior)



RoB List

Displays a list of RoB and Time Stamp information.

- FFD Group
 - Displays the FFD Group that corresponds to the Code.
- Code
 - Displays collected codes.
- Behavior
 - Displays the Behavior that corresponds to the Code.
- Time and Date
 - Displays the time and date at the time when detection of the Code was performed.
- Key Cycle

- Displays the Key Cycle at the time when detection of the Code was performed.
- Elapsed Time
Displays the Elapsed Time at the time when detection of the Code was performed.



Current Key Cycle

Displays the Key Cycle included in the Current Time information.



Current Key Cycle Elapsed Time

Displays the Elapsed Time included in the Current Time information.



RoB Clear Button

Clears the RoB data.



Next Button

Switches the screen to the FFD information screen for the selected Code.



Refresh Button

Acquires RoB information again and adds it to the event file tree of the diagnosis record tab. The RoB information acquisition result is displayed on the screen.

The code selected on the list screen for the causes of charging operation failure is displayed, the codes in the same FFD Group as the selected code are displayed, and the FFD information is displayed.

2012 Prius PHV
22R-FXE

System : Plug-in Control
FFD Group : 02

Parameter	Unit	Latest					
		3rd Latest	2nd Latest	-3	-2	-1	0
Code		X1030	X1030	X1030			
Behavior		Charge Canceled(AC Line)	Charge Canceled(AC Line)	Charge Canceled(AC Line)			
Key Cycle		00462	00462	00462			
Elapsed Time		00000.02:18.7	00000.02:18.7	-	-	-	00000.02:18.7
Time and Date		6/1/2011 9:07 AM	6/1/2011 9:07 AM	-	-	-	6/1/2011 9:07 AM
Charging Control Status		-128	-128	-128	-128	-128	-128
Plug-in Charge Start Signal		ON	ON	ON	ON	ON	ON
On-Board Charger Status		-93	-93	-93	-93	-93	-93
On-Board Charger Input Voltage	V	437.0	437.0	437.0	437.0	437.0	437.0
On-Board Charger Stopping Input Voltage	V	-13942.0	-13942.0	-13942.0	-13942.0	-13942.0	-13942.0
Rated Electricity Power Supply	kW	-273.70	-273.70	-273.70	-273.70	-273.70	-273.70
Current Upper Limit Value	A	-102.45	-102.45	-102.45	-102.45	-102.45	-102.45
Charger Output Current	A	-118.14	-118.14	-118.14	-118.14	-118.14	-118.14
Offset Value of Charger Output Current	A	-116.15	-116.15	-116.15	-116.15	-116.15	-116.15
Charger Output Voltage	V	643.0	643.0	643.0	643.0	643.0	643.0
Auxiliary Battery Voltage	V	0.31	0.31	0.31	0.31	0.31	0.31
SOC	%	2.7	2.7	2.7	2.7	2.7	2.7
Battery Minimum Temperature	F	-184	-184	-184	-184	-184	-184
Battery Current	A	-304.48	-304.48	-304.48	-304.48	-304.48	-304.48
Battery Current(High Accuracy)	A	-108.33	-108.33	-108.33	-108.33	-108.33	-108.33
Battery Voltage	V	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0
Normal Charging Complete Status		Incomp	Incomp	Incomp	Incomp	Incomp	Incomp
Push Charging Complete Status		Complete	Complete	Complete	Complete	Complete	Complete

Diagnosis Screen (Record on Behavior FFD information)



System

Displays the system name of the record selected.



FFD Group

Displays the FFD Group of the record selected.



RoB List

Displays the FFD Group information of the record selected.

- Parameter

Displays parameters in the following order.

- 1st. Code
- 2nd. Behavior
- 3rd. Key Cycle
- 4th. Elapsed Time
- 5th. Time and Date
- 6th. FFD Parameters

- Unit

Displays unit corresponding to the parameter.

- 3rd Latest

Displays the content of the 3rd latest code in the relevant FFD Group.

- 2nd Latest

Displays the content of the 2nd latest code in the relevant FFD Group.

- Latest

Displays the content of the latest code in the relevant FFD Group.



Current Key Cycle

Displays the Key Cycle included in the Current Time information.



Current Key Cycle Elapsed Time

Displays the Elapsed Time included in the Current Time information.



Back Button

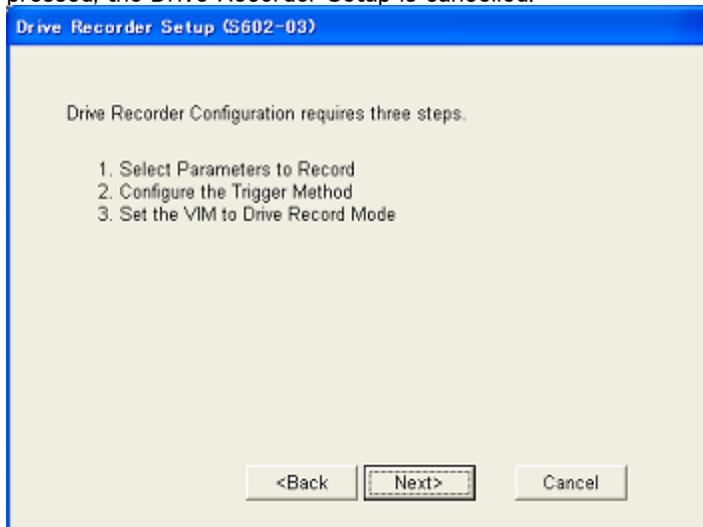
Returns the screen to the causes of charging operation failure screen.

Drive Recorder

The Drive Recorder can be accessed from Drive Recorder Configure in the Function Menu, or from the Drive Recorder Setup screen on the Utility Selection Menu screen. The Drive Recorder can only be used when connected to the vehicle.

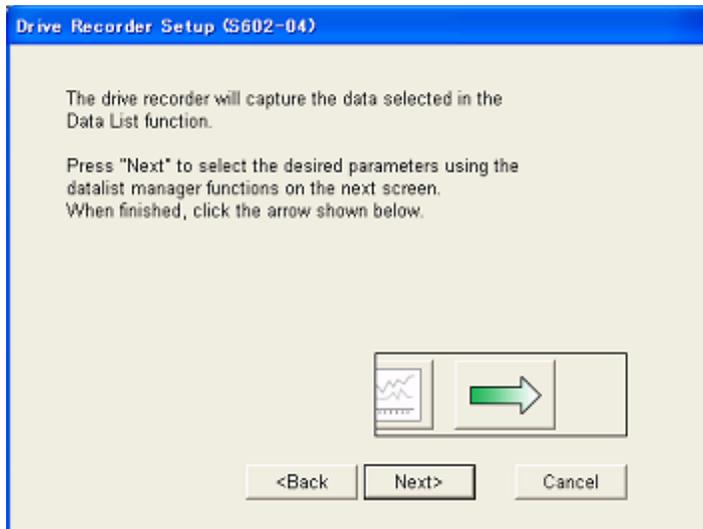
Drive Recorder Setup

The Drive Recorder Setup screen is a notification to the user concerning the Drive Recorder usage procedure. When the Next button is pressed, the current screen transitions to the next screen. When the Cancel button is pressed, the Drive Recorder Setup is cancelled.



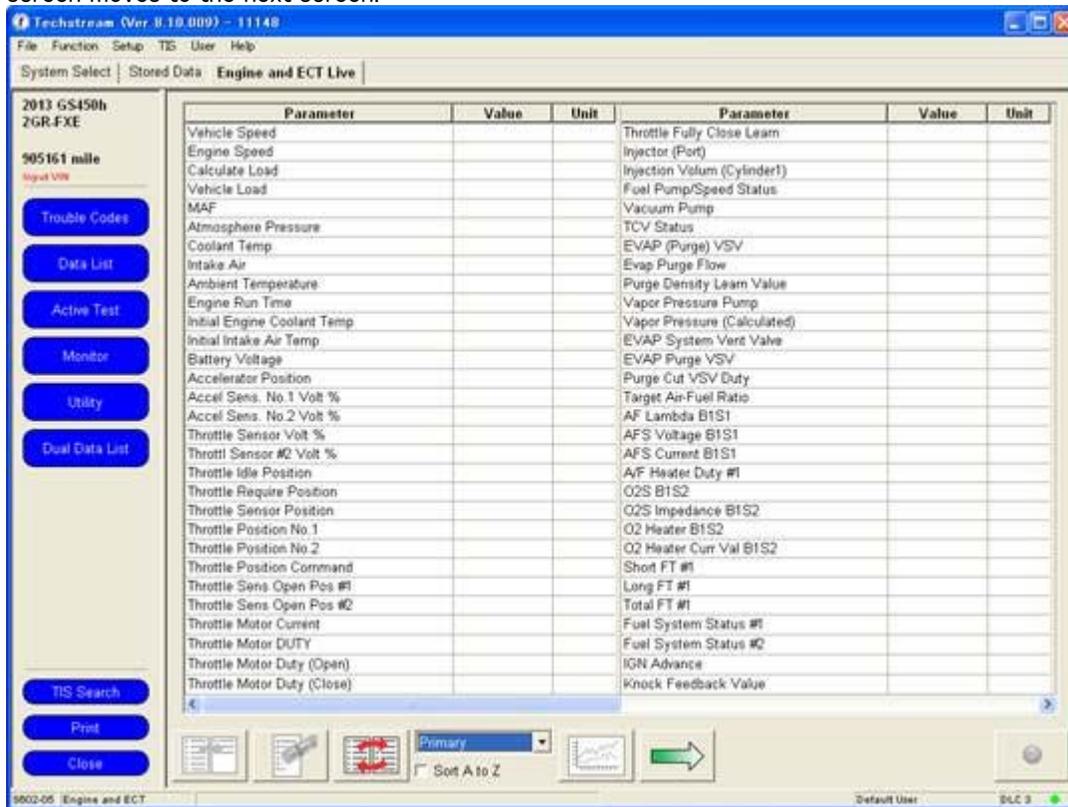
Drive Recorder Setup Dialog

This screen explains the selection method of target data for the Drive Recorder. If the Back button is pressed, the current screen returns to the previous screen. If the Next button is pressed, the current screen moves to the next screen. When the Cancel button is pressed, the Drive Recorder Setup is cancelled.



Drive Recorder Setup Dialog

Data to be recorded using the Drive Recorder can be designated on this screen. The data displayed on the data list screen is the data that is possible to be recorded by the Drive Recorder. Just as with a normal data list screen, it is possible to use the data manager. When the OK button on the displayed screen is pressed, the current screen moves to the next screen.



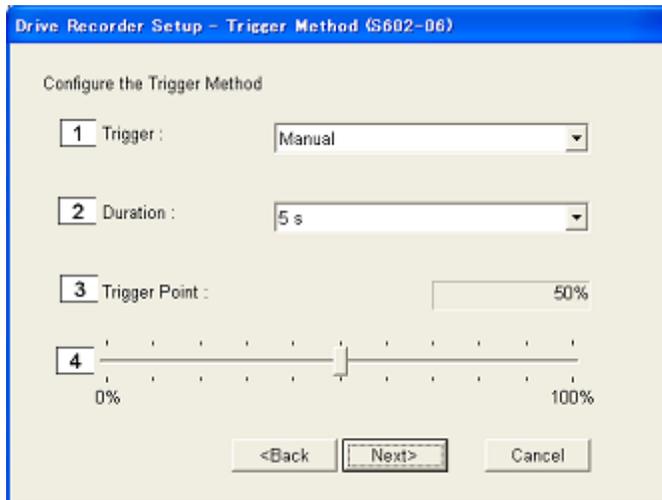
Diagnosis Screen (Drive Recorder)



Apply button

Terminates the selection of the Drive Recorder target data. If the Apply button is pressed, the current screen moves to the next Drive Recorder Setup screen. If no data is selected, this button cannot be used.

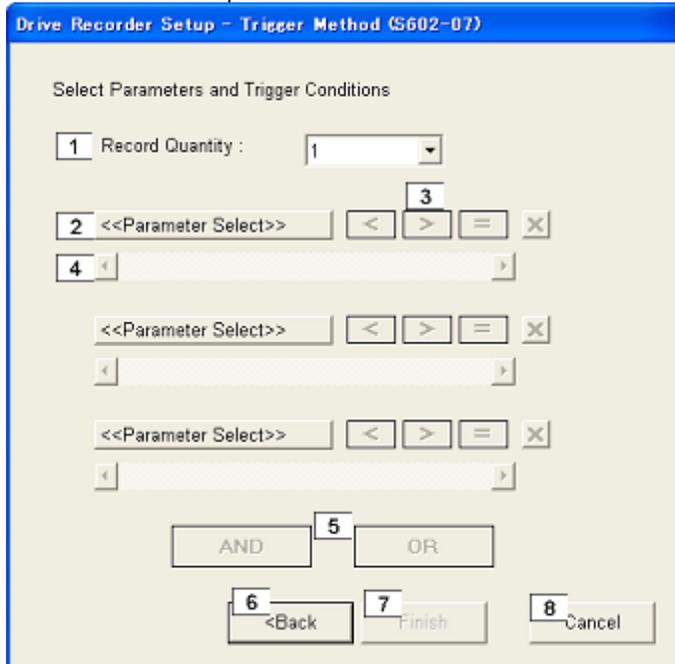
Select the Drive Recorder trigger classification from this screen. In addition, the length of recording data as well as the proportion of trigger position in relation to overall recorded data can be selected.



Drive Recorder Setup Dialog

- 1 Trigger Type pull down list
Set the Snapshot trigger classification. Switches to Select Parameter and Trigger Conditions when a parameter is set for the trigger. Trigger classifications can be selected from the following three (Manual, DTC, Parameter).
- 2 Duration pull down list
Set the Snapshot recording time. Recording time can be selected from the following (5 s, 15 s, 30 s, 60 s, 90 s, 3 min, 5 min)
- 3 Trigger Point
Displays the trigger position as a numeric value in relation to overall data recording. Change this value from the Trigger Point Gauge.
- 4 Trigger Point Gauge
Configure the trigger position in relation to overall data recording (0% – 100%). Change the trigger position by dragging the marker.

Perform detailed parameter settings for Drive Recorder triggers from this screen. It is also possible to set the conditions for each parameter.



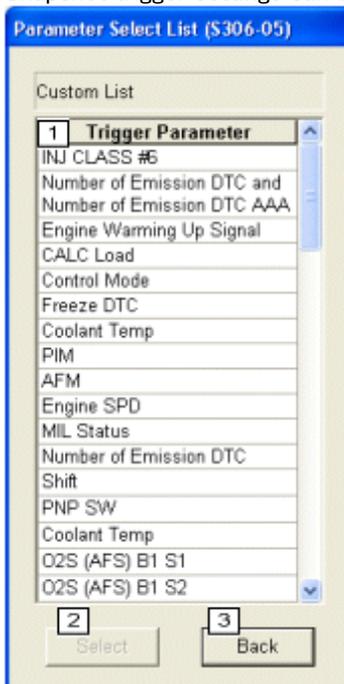
Parameter Trigger Configuration Dialog

- 1 Record Quantity

Designate the number of recordings for a parameter trigger. The number of recordings can be set from 1–10.

- 2 Trigger type button
Moves the current screen to a screen to select parameters for trigger designation. Once a parameter name is selected, the name is displayed on the button.
- 3 Condition-type
Selects the condition type for each trigger condition value.
- 4 Parameter value gauge
Designate the parameter condition value. The designated results are reflected in the Parameter Value.
- 5 Parameter Condition
Selects the AND or OR condition in relation to each set parameter for a specific trigger condition.
- 6 Back button
Returns the screen back one Parameter Trigger Configuration value.
- 7 Finish button
Sets the set trigger condition as a parameter trigger, and moves the current screen to the next screen.
- 8 Cancel button
Cancels the setting contents, and returns the current screen to one screen before the Drive Recorder Setup begins.

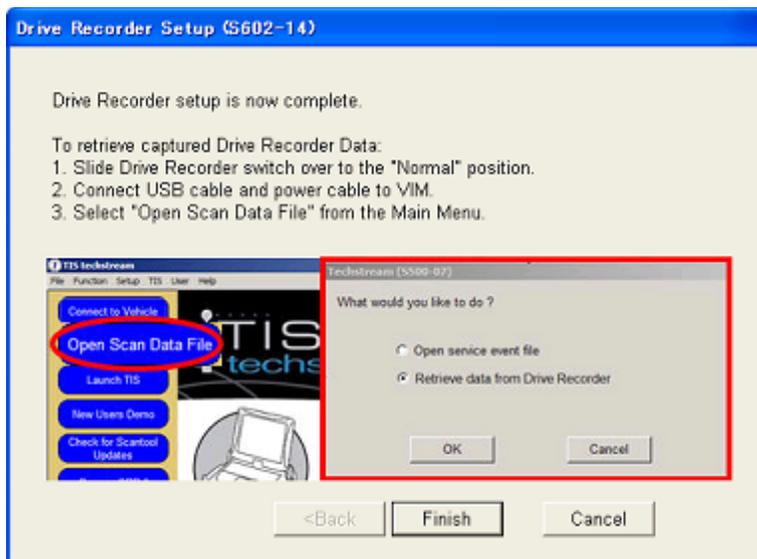
Snapshot trigger settings can be performed for up to three parameters.



Parameter Select List Dialog

-  Trigger Parameter
Select the desired parameter to be used as a trigger.
-  SELECT button
Set the selected parameter as a trigger for the called out screen. Closes the screen after settings are performed.
-  Back button
Cancels parameter selection and closes the screen.

This screen informs the user when Drive Recorder settings are completed. It also explains the method to reference recorded data.

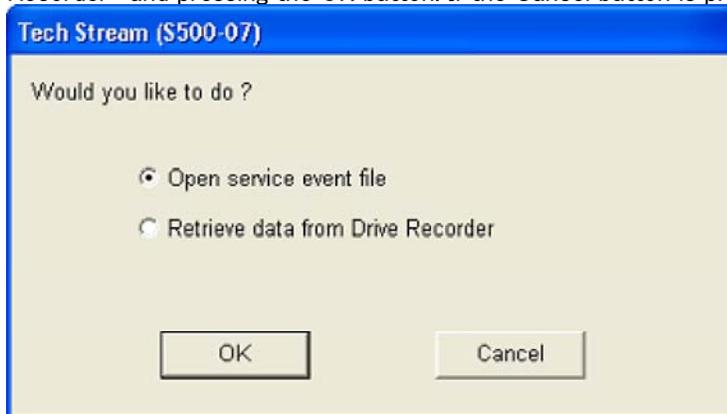


Drive Recorder Setup Dialog

Drive Recorder Data Import

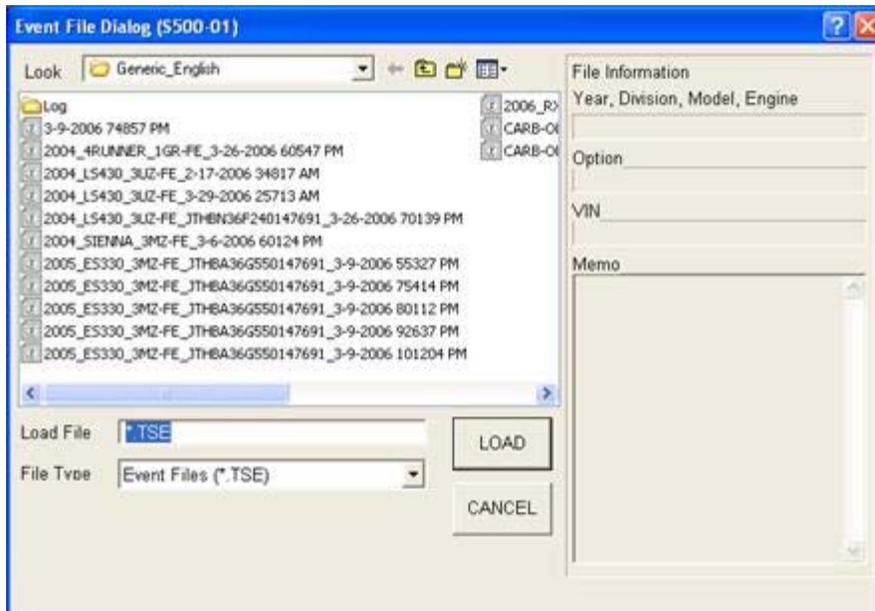
Drive Recorder Data Import can be performed from Open Scan Data File on the Main Menu Screen. Drive Record Data Import can also be performed from Open on the file menu.

This screen is displayed in order to designate the file acquisition path when opening files. Designate the Event File reference address for your PC by selecting "Open service Event File" and pressing the OK button. Designate the Event File reference address for the VIM (Vehicle Interface Module) by selecting "Retrieve data from Drive Recorder" and pressing the OK button. If the Cancel button is pressed, the file open operation is cancelled.



Drive Recorder Data Import Dialog

Designate the folder for files to be forwarded to from this screen. The default directory for each user is the directory displayed as the initial data save address. When the OK button is pressed, the file is forwarded to the designated directory. When the cancel button is pressed, the operation is cancelled and the file is not sent.



File Dialog

Health Check

When a Health Check is performed, the target ECU, Monitor Status and Calibration ID are acquired and displayed. The results of the Health Check are added to the Stored Data Tab Event File Tree. However, data cannot be saved as an Event File at this point. To save as an Event File, perform a Save from the File menu.

2015 NX200t
8AR.FTS

Tire Pressure / Threshold Value [psi(gauge)]

Sensor 1: 77.9 / 77.9 Sensor 2: 77.9 / 77.9
 Sensor 3: 77.9 / 77.9 Sensor 4: 77.9 / 77.9
 Sensor 5: 77.9 / 77.9

Compensation Pressure [psi(gauge)]
 Front : 389.8
 Rear : 389.8

Health Check Results
 Enhanced Generic

PERMANENT: YES

System	Monitor Status	DTC	Conf	Pend	Hist	Test Failed	SB	Calibration	Update
Engine	Inc	P001400	X				2	0000B00AA000000 0	2
		P003012		X		X	2		
		P007A11					2		
		P010012					2		
		P011511		X			2		
		P013A00		X	X		2		
		P157800		X	X		X	2	
		B279986					X	2	
		UD12287					X	2	
		C2111		X		X		2	
		C2112		X		X		2	
		C2113		X		X		2	
		C2114		X		X		2	
		C2115		X		X		2	
		C2121		X		X		2	
		C2122		X		X		2	
C2123		X		X		2			
C2124		X		X		2			
C2125		X		X		2			
C2126		X		X		2			

2014.05.09 10:43:04
 Campaign Status: ?

Diagnosis Screen (Health Check_Type1)

2015 NX200t
8AR.FTS

Tire Pressure / Threshold Value [psi(gauge)]

Sensor 1: 77.9 / 77.9 Sensor 2: 77.9 / 77.9
 Sensor 3: 77.9 / 77.9 Sensor 4: 77.9 / 77.9
 Sensor 5: 77.9 / 77.9

Compensation Pressure [psi(gauge)]
 Front : 389.8
 Rear : 389.8

Health Check Results
 Enhanced Generic

System	Monitor Status	DTC	Conf	Pend	Perm	SB	Calibration	Update
Engine	Inc	P0001	X		X	2	0000B00AA000000 0	2
		P0604		X	X	2		
		P0942			X	2		
		P0A08		X		2		
		P0A8F		X	X	2		

2014.05.09 10:43:04
 Campaign Status: ?

Diagnosis Screen (Health Check_Type2)

1 Campaign status [TIS Function]

Acquires and displays Special Service Campaign information from the TIS server. If "OPEN" or "CLOSED" is displayed, the Campaign status screen is displayed. If "NONE" or "?", the Campaign status screen is not displayed.

If the system is not able to access the SSC information, the SSC Availability will not be displayed.

2 Health Check Results list

Displays a list of Health Check results. If a DTC or Pending FFD exists, the screen moves to the head of the corresponding column, and the row becomes highlighted in yellow.

- System

If there is one or more DTC(s) or Pending FFD, the text displays in red. Click the DTC name to start the DTC function.

- Monitor Status

Starts the Monitor function.

- FFD

For FFD which is available to a DTC (including Pending FFD which is not associated with any DTCs), the icon appears. When clicked, transfer to FFD page.

- DTC, DTC TYPE

When a DTC or DTC TYPE in the list is clicked, the DTC or DTC TYPE for the clicked record is displayed.

- Enhanced tab

When there is a current, confirmed, pending, past, or latest result DTC, the DTC is displayed in the DTC column and "x" is displayed in the corresponding DTC category column.

- Generic tab

When there is a confirmed, pending, or permanent DTC, the DTC is displayed in the DTC column and "x" is displayed in the corresponding DTC category column.

- SB

Indicates if a Service Bulletin inquiry URL exists. "Yes" is displayed if there is a corresponding SB for the DTC. "Yes" displays the corresponding TSB page in a browser.

- Calibration

Displays the ECU Calibration ID. "NA" will be displayed in cases where the Calibration ID cannot be acquired.

- Cal.Update [TIS Function]

The TIS Function inquires with TIS and displays the update status of Calibration data. "-" will be displayed in cases where the Calibration ID cannot be acquired. "Yes" will be displayed when updated Calibration data is available. "No" will be displayed when updated Calibration data is not available.

In environments where a connection cannot be made to TIS, there are cases when the "Cal. Update?" column may not be displayed.

3 Date / Time

Displays the date and time the Health Check was performed.

4 Tire Pressure / Threshold Value

Displays the Tire Pressure in red and the Threshold Value in black. When an abnormal tire pressure has been acquired, "N/A" is displayed.

5 Compensation Pressure

Displays the compensation tire pressure.

6 Refresh Tire Pressure button

Tire pressure values from the vehicle are acquired again and displayed.

7 Health Check Result tab

Enhanced and Generic displays can be switched by selecting the tab.

Results for all systems installed in the vehicle are displayed on Enhanced tab screen and results for only regulation systems are displayed on Generic tab screen.

8 Permanent DTC Status

When a permanent DTC is detected, "YES" is displayed; when none is detected, "NO" is displayed.

This item is shown only when Enhanced tab screen is displayed.



Time Stamp button

Switches the screen to the Time Stamp screen.



Health Check Report button

Sends the Health Check Report data to the server. A URL is then received from the server and the report is displayed using a web browser.



Clear All DTCs button

Deletes all DTC, freeze frame, monitor status, monitor results information and Information Codes.



New Health Check

Reacquires Health Check information, and adds an additional entry in the Stored Data Tab Even File Tree.
Displays Health Check results.

Note

Items with the "TIS Function" icon attached can only be used in environments where a connection can be made to TIS.

System Area Selection

ECU(s) are grouped in categories called "System Areas" such as Powertrain, Chassis, etc. Health Check allows the user to diagnose ECU(s) that belong to a specific system area to shorten the time required to check.

System Area Selection Dialog

- 1 ECU Select check box
Select the Health Check System Area.
- 2 Help button
Displays help content.
- 3 Next button
Performs the Health Check or starts the Tire Pressure Calculator Utility.
- 4 Cancel button
Cancels the Health Check.
- 5 Store All Data check box
The Health Check information and DTC-related information (all DTC, all FFD, all detailed information, Operation History for Hybrid Control, Operation History, monitor status and monitor results information) of

the system selected in the ECU selection checkbox will be stored.

- 6** Compensation Tire Pressure check box
Select whether to display the compensation tire pressure.
- 7** Include Time Stamp radio button
Select whether to include Time Stamp information in Store All Data.

Tire Pressure Calculator Utility

Input information necessary for calculating the compensation tire pressure.



Tire Pressure Calculator Utility Dialog

- 1** Tire Condition radio button
Select the appropriate tire condition.
- 2** User Input Information
Input parameters for calculating the compensation tire pressure.
- 3** OK button
Performs the Health Check.
- 4** Cancel button
Returns the screen to the System Area Selection.

Campaign Status

This screen displays the HTML message received from the server.



Campaign Status Dialog

- 1** Message Area
The message received from the server when the Health Check is executed is displayed.
- 2** Campaign Details Button
Opens the campaign details page for the applicable vehicle in the browser.
- 3** Print button
Opens the print screen.
- 4** Close button
Closes the screen.

Time Stamp

When a Time Stamp is performed, the target ECU are acquired and displayed. The results of the Time Stamp are added to the Stored Data Tab Event File Tree. However, data cannot be saved as an Event File at this point. To save as an Event File, perform a Save from the File menu.



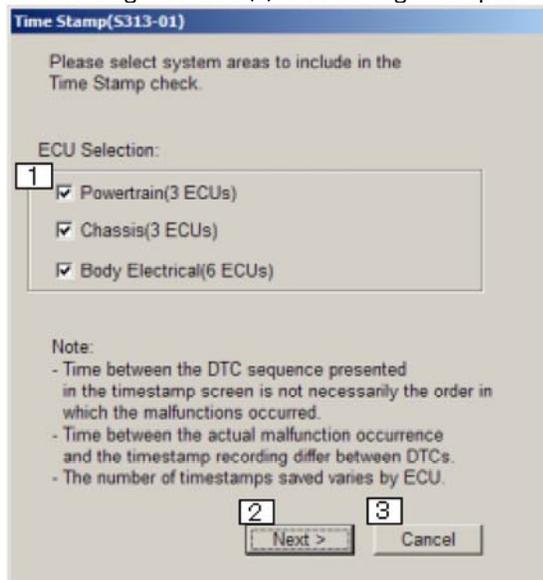
Diagnosis Screen (Time Stamp)

- 1** Current Key Cycle
Displays the "Key Cycle" included in the Current Time information.
- 2** Current Key Cycle Elapsed Time
Displays the "Elapsed Time" included in the Current Time information.
- 3** Time Stamp list
Displays all the detected DTC records and Time Stamp information.
If the Time Stamp function is not supported, highlights the records of the system in gray.
 - System
Displays the system name for the DTC (including Pending FFD).
 - Time and Date/ODO
Displays the "Time and Date" for the system.

- When ECU is supported, the travel distance is also displayed.
- Key Cycle
Displays the "Key Cycle" included in the Time Stamp information.
- Elapsed Time
Displays the "Elapsed Time" included in the Time Stamp information.
- Type
Displays the following depending on the "Clock Type".
Normal Clock: "-"
Independent Clock (IG): "IG"
Independent Clock (ACC): "ACC"
Independent Clock (+B): "+B"
Independent Clock (other): "x"
- DTC
Displays the DTCs present. If the DTC type is Pending DTC, feed a line and add "Pending".
- 4** DTC Description
Displays details concerning the selected DTC.
- 5** Combo Box / Dropdown List
Displays "All Systems" and systems with one or more DTCs.

System Area Selection for Time Stamp

ECU(s) are grouped in categories called "System Areas" such as Powertrain, Chassis, etc. Time Stamp allows the user to diagnose ECU(s) that belong to a specific system area to shorten the time required to check.



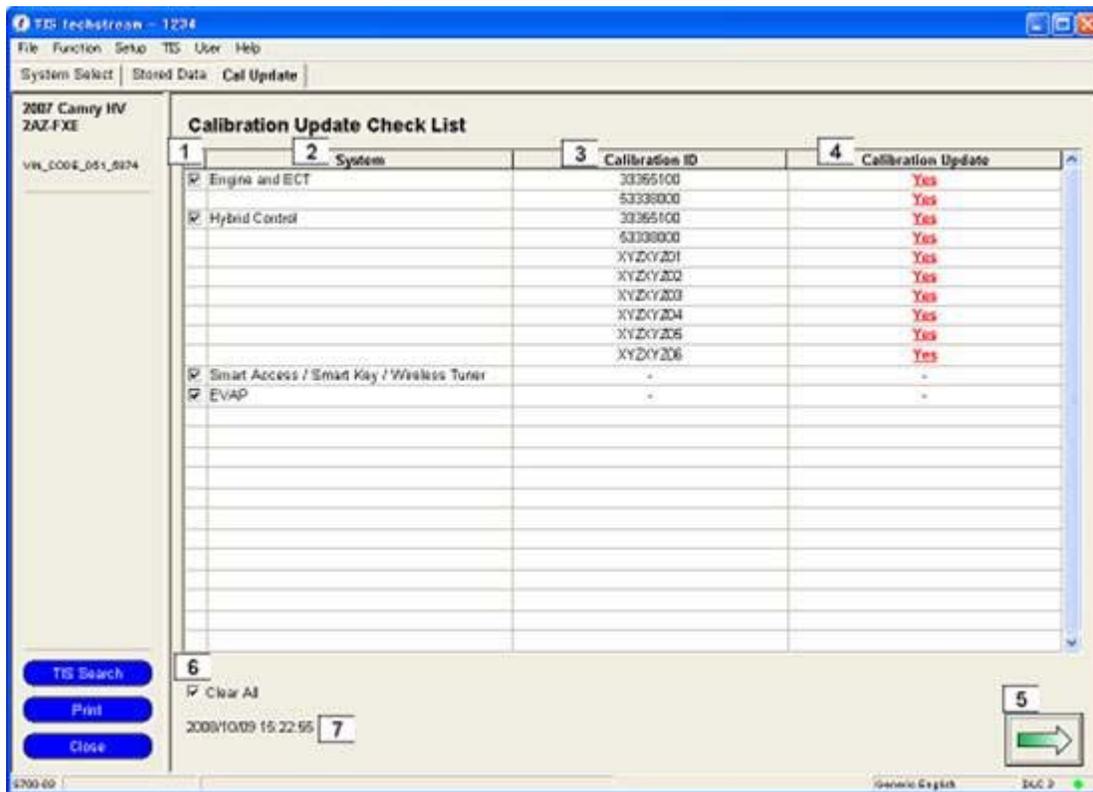
System Area Selection for Time Stamp Dialog

- 1** ECU Select check box
Select the Time Stamp System Area.
- 2** Next button
Performs the Time Stamp.
- 3** Cancel button
Cancels the Health Check.

Calibration Update Check

Press the ECU Reprogramming button on the System Select display.

The Calibration Update Check screen displays whether or not there is a Calibration ID and update for vehicles with ECU's designed for Reprogramming. If there is an update, a link to TIS is displayed. TIS can be displayed by clicking the link.

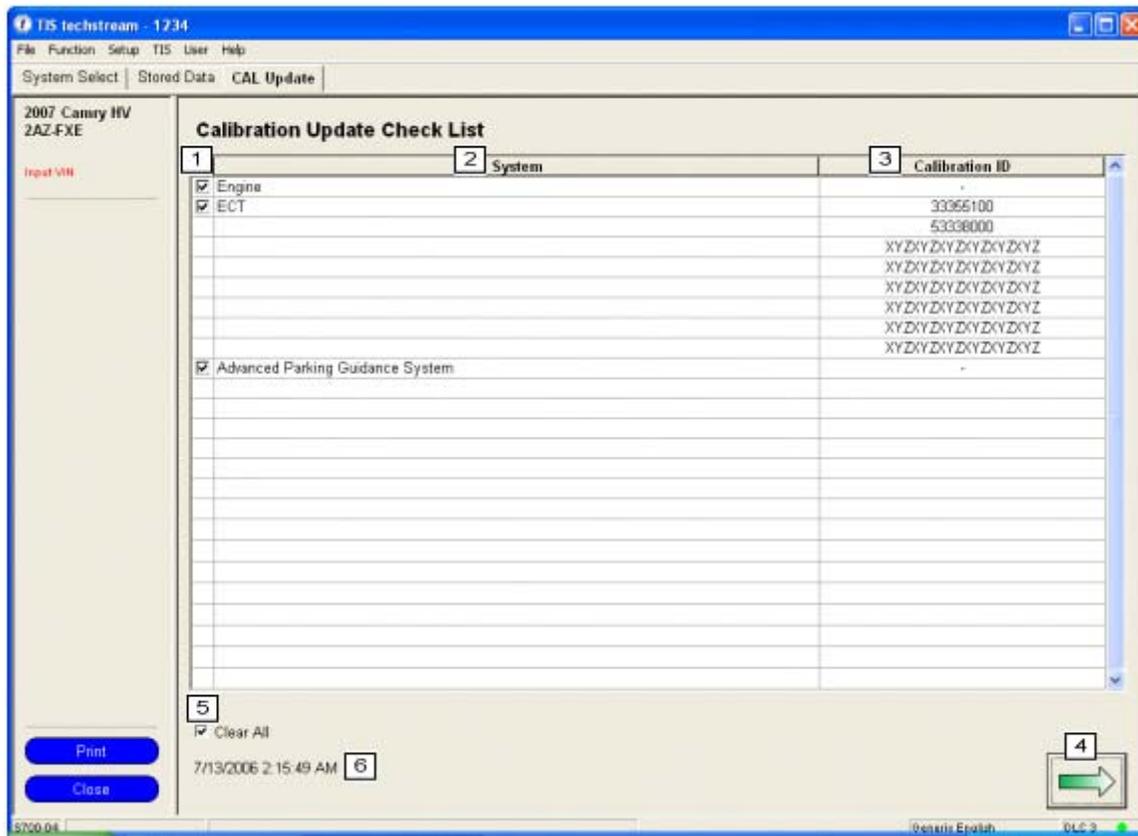


Diagnosis Screen (Calibration Update Check List)

- 1 Select Check Box
Allows the target for the Calibration Check to be selected from among the displayed ECU's. When the Cal Check button is pressed, the calibration check will be performed on only the checked ECU.
- 2 System
Displays a list of ECU's under diagnosis that are designed for reprogramming and installed on the vehicle.
- 3 Calibration ID
Displays the Calibration ID for each installed ECU. ECU's consist of a number of CPU's. ECU's are displayed in multiple rows. "N/A" is displayed for ECU's for which a Calibration ID cannot be acquired.
- 4 Calibration Update [TIS Function]
Displays whether or not reprogramming is necessary for the Calibration ID acquired from the vehicle (refer to above). The Calibration ID check is displayed as the results of the inquiry with TIS. If reprogramming is necessary, "Yes" will be displayed as a link to the Calibration download site. To perform reprogramming, click the link to start TIS. When the target Calibration File on the TIS site is clicked, the file will be downloaded and the Calibration Update Wizard will start.
If "N/A" is displayed for the Calibration ID, the Calibration Update function cannot be used. The Calibration Update column will not be displayed for Tech Streams that do not have TIS connection information.
- 5 Cal Check button
Acquires the Calibration ID for the ECU selected in the Calibration Update Check List from the vehicle. This Calibration ID is checked on TIS to verify whether or not updating is necessary.
- 6 Check All check box
Inserts or removes checks from all checkboxes on the Calibration Update Check List.
- 7 Date / Time
Displays the date and time the Cal Check was performed.

Note

The screen below is displayed for environments in which TIS cannot be used. The Calibration ID's for vehicles with ECU's designed for reprogramming are displayed. The TIS link is not displayed.



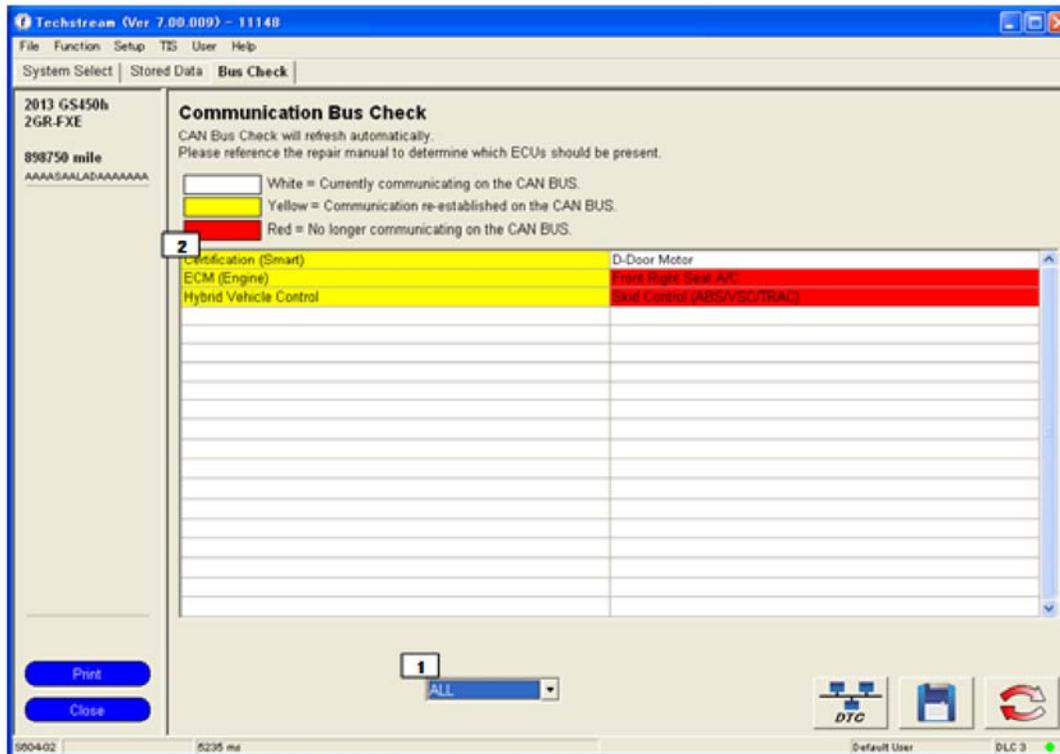
Diagnosis Screen (Calibration Update Check List)

- 1 Select Check Box
Allows the target for the Calibration Check to be selected from among the displayed ECU's. When the Cal Check button is pressed, the calibration check will be performed on only the checked ECU.
- 2 System
Displays a list of ECU's under diagnosis that are designed for reprogramming and installed in the vehicle.
- 3 Calibration ID
Displays the Calibration ID for each installed ECU. ECU's consist of a number of CPU's. ECU's are displayed in multiple rows. "Not Reprogrammable" is displayed for ECU's for which a Calibration ID cannot be acquired.
- 4 Cal Check button
Acquires the Calibration ID from the vehicle for the ECU selected in the Calibration Update Check List. This Calibration ID is checked on TIS to verify whether or not updating is necessary.
- 5 Check All check box
Inserts or removes checks from all checkboxes on the Calibration Update Check List.
- 6 Date / Time
Displays the date and time the Cal Check was performed.

CAN Bus Check

Press the CAN Bus Check button on the System Select display.

When performing a CAN Bus Check, it is possible to display a list of all ECU's connected to the CAN bus.



Diagnosis Screen (CAN Bus Check)

1 Combo Box / Dropdown List

Display "ALL", "V Bus" and confirmed G/W ECU's in the Dropdown list.

2 CAN Bus Check List

Displays All systems, systems connected to V Bus, or systems connected to G/W ECU according to the selected item in the Combo Box. Continuously communicates with ECUs and updates the list when the connection status changes. Change the background color according to the connection status changes that have happened.

- Continuously detected without a problem: White
- Lost connection once, but now detected: Yellow
- Detected once, but not detected now: Red
- Included in V Bus, but not detected at all:



Communication Malfunction Check button

Transition to Communication Malfunction Check screen.



Store button

Collects and stores CAN Bus Check results and Communication DTCs.



Refresh Button

When clicked, updates the results by communicating with the same ECUs as the previous time.

Communication Malfunction Check

When performing a Communication Malfunction Check, it is possible to display the communication malfunction DTCs from all system DTCs in the vehicle.

